

GenCore version 5.1.4-P5.4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 12, 2003, 15:05:12 ; Search time 27 Seconds

(without alignments)
2696.012 Million cell updates/sec

Title: US-09-804-472-2

Sequence: 1 MDASSDPYLPYDGGGDNIPL.....DILRHMAQTANODPASIWFN 791

Scoring table:

BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 349150 seqs, 92025710 residues

Total number of hits satisfying chosen parameters: 349150

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published_Applications_AA:*

1: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*\n2: /cgn2_6/ptodata/1/pubpaa/PCCT_NEW_PUB.pep:*\n3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*\n4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*\n5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*\n6: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*\n7: /cgn2_6/ptodata/1/pubpaa/PCCT_PUBCOMB.pep:*\n8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*\n9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*\n10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*\n11: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*\n12: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep:*\n13: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:*\n14: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|------------------------|--------------------|
| 1 | 4177 | 100.0 | 791 | 10 US-09-804-472-2 | Sequence 2, Appl1 |
| 2 | 4033 | 96.6 | 765 | 10 US-09-804-472-4 | Sequence 4, Appl1 |
| 3 | 4022 | 96.3 | 767 | 10 US-09-804-472-5 | Sequence 5, Appl1 |
| 4 | 3217 | 77.0 | 747 | 10 US-10-109-562A-2 | Sequence 2, Appl1 |
| 5 | 2619 | 62.7 | 851 | 9 US-09-991-936-1915 | Sequence 1915, Ap |
| 6 | 822 | 19.7 | 182 | 10 US-09-864-761-42913 | Sequence 42913, A |
| 7 | 687.5 | 16.5 | 166 | 10 US-09-864-761-47670 | Sequence 47670, A |
| 8 | 565.5 | 13.5 | 161 | 10 US-09-864-761-34035 | Sequence 34035, A |
| 9 | 311 | 7.4 | 60 | 10 US-09-804-472-6 | Sequence 6, Appl1 |
| 10 | 267 | 6.4 | 75 | 10 US-09-864-761-34036 | Sequence 34036, A |
| 11 | 240 | 5.7 | 50 | 10 US-09-864-761-37070 | Sequence 37070, A |
| 12 | 169 | 4.0 | 423 | 9 US-09-738-626-3570 | Sequence 3570, Ap |
| 13 | 115.5 | 2.8 | 329 | 12 US-10-014-502-2 | Sequence 2, Appl1 |
| 14 | 112.5 | 2.7 | 1094 | 9 US-09-712-363-287 | Sequence 287, Ap |
| 15 | 112 | 2.7 | 2894 | 9 US-10-044-995-23 | Sequence 23, Appl1 |
| 16 | 112 | 2.7 | 2894 | 10 US-09-941-611-23 | Sequence 23, Appl1 |
| 17 | 112 | 2.7 | 3011 | 10 US-09-916-359-2 | Sequence 2, Appl1 |
| 18 | 111 | 2.7 | 618 | 9 US-10-216-335-2 | Sequence 2, Appl1 |
| 19 | 109 | 2.6 | 828 | 9 US-10-270-336-2 | Sequence 2, Appl1 |

| | | | | | |
|----|-------|-----|------|------------------------|-------------------|
| 20 | 108.5 | 2.6 | 392 | 10 US-09-815-242-12755 | Sequence 12755, A |
| 21 | 108.5 | 2.6 | 392 | 10 US-09-815-242-13117 | Sequence 13117, A |
| 22 | 108.5 | 2.6 | 414 | 10 US-09-815-242-5780 | Sequence 5780, Ap |
| 23 | 108 | 2.6 | 1005 | 9 US-10-176-847-90 | Sequence 90, Appl |
| 24 | 107 | 2.6 | 794 | 9 US-10-270-336-7 | Sequence 7, Appl1 |
| 25 | 107 | 2.6 | 823 | 9 US-10-270-336-6 | Sequence 6, Appl1 |
| 26 | 107 | 2.6 | 3011 | 9 US-09-891-894-3 | Sequence 3, Appl1 |
| 27 | 107 | 2.6 | 3011 | 9 US-09-995-937-20 | Sequence 20, Appl |
| 28 | 107 | 2.6 | 3011 | 9 US-09-917-563-20 | Sequence 20, Appl |
| 29 | 107 | 2.6 | 3011 | 10 US-09-742-659-4 | Sequence 4, Appl1 |
| 30 | 107 | 2.6 | 3011 | 10 US-09-238-076-20 | Sequence 20, Appl |
| 31 | 107 | 2.6 | 3012 | 9 US-09-995-937-2 | Sequence 2, Appl1 |
| 32 | 107 | 2.6 | 3012 | 9 US-09-917-563-2 | Sequence 2, Appl1 |
| 33 | 107 | 2.6 | 3012 | 10 US-09-238-076-2 | Sequence 2, Appl1 |
| 34 | 106 | 2.5 | 915 | 9 US-10-270-336-5 | Sequence 5, Appl1 |
| 35 | 105 | 2.5 | 3011 | 9 US-09-747-419-20 | Sequence 20, Appl |
| 36 | 105 | 2.5 | 3011 | 10 US-09-952-572-9 | Sequence 9, Appl1 |
| 37 | 104.5 | 2.5 | 379 | 12 US-10-014-502-4 | Sequence 4, Appl1 |
| 38 | 104.5 | 2.5 | 475 | 9 US-09-738-626-6117 | Sequence 6117, Ap |
| 39 | 104 | 2.5 | 1276 | 10 US-09-866-866A-8 | Sequence 8, Appl1 |
| 40 | 103.5 | 2.5 | 679 | 10 US-09-815-242-5658 | Sequence 5658, Ap |
| 41 | 103.5 | 2.5 | 681 | 10 US-09-815-242-12270 | Sequence 12270, A |
| 42 | 103 | 2.5 | 3011 | 9 US-10-104-966-1 | Sequence 1, Appl1 |
| 43 | 103 | 2.5 | 3011 | 10 US-09-929-955-1 | Sequence 1, Appl1 |
| 44 | 102.5 | 2.5 | 395 | 10 US-09-815-242-13892 | Sequence 13892, A |
| 45 | 102 | 2.4 | 732 | 9 US-09-922-364A-43 | Sequence 43, Appl |

ALIGNMENTS

| | | |
|---|----------------------|--------------------|
| RESULT 1 | US-09-804-472-2 | US-09-804-472-2 |
| Sequence 2, Application US/09804472 | | |
| Patent No. US20020143146A1 | | |
| GENERAL INFORMATION: | | |
| APPLICANT: SHAO, Wei et al. | | |
| TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS, | | |
| TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS, | | |
| TITLE OF INVENTION: AND USES THEREOF | | |
| FILE REFERENCE: CLO01163 | | |
| CURRENT APPLICATION NUMBER: US/09/804,472 | | |
| CURRENT FILING DATE: 2001-03-13 | | |
| NUMBER OF SEQ ID NOS: 6 | | |
| SOFTWARE: FastSeq for Windows Version 4.0 | | |
| SEQ ID NO 2 | | |
| LENGTH: 791 | | |
| TYPE: PRT | | |
| ORGANISM: Human | | |
| US-09-804-472-2 | | |
| Query Match | 100.0%; Score 4177; | DB 10; Length 791; |
| Best Local Similarity | 100.0%; Pred. No. 0; | |
| Matches 791; Conservative | 0; Mismatches | 0; Indels |
| | | 0; Gaps |
| | | 0; |
| QY 1 MDASSDPYLPYDGGGDNIPURELHKRGTHYTMNGSSINSHLLDLDEPIPGVGYDD 60 | | |
| | | |
| DB 1 MDASSDPYLPYDGGGDNIPURELHKRGTHYTMNGSSINSHLLDLDEPIPGVGYDD 60 | | |
| | | |
| QY 61 PFTIDWRECKDKRHRHRIRNSKKESAWEMTKSLYDAMSGWLVTLTGLASGALGLID 120 | | |
| | | |
| DB 61 PFTIDWRECKDKRHRHRIRNSKKESAWEMTKSLYDAMSGWLVTLTGLASGALGLID 120 | | |
| | | |
| QY 121 IADDMWTDLKEGICLSALWYNHQCCWGNENETFEERDRCPOKKTWAEILIGAEKPGSY 180 | | |
| | | |
| DB 121 IADDMWTDLKEGICLSALWYNHQCCWGNENETFEERDRCPOKKTWAEILIGAEKPGSY 180 | | |
| | | |
| QY 181 INMYIYIFWALSFALAVSLVKVPAPYACGSGIPKTIISGFIIRGYLGKTTLTKTI 240 | | |
| | | |
| DB 181 INMYIYIFWALSFALAVSLVKVPAPYACGSGIPKTIISGFIIRGYLGKTTLTKTI 240 | | |
| | | |
| QY 241 TLVLAVASGLSKREGPLVAVACCCGNIFSYLEPKYSTNEAKKREVLASASAGSVARF 300 | | |
| | | |

```

Db 241 TLVLAVASGLSGKEGPLVHVACCCGNIIFYLPKYSTNEAKKREVLISAAGSVAFG 300
QY 301 APIGVLFSLEEVSYYPEPLKTLMRSEFPAALVAAFVLSRINPFGNSRLVLFVEYHTPMYL 360
Db 301 APIGVLFSLEEVSYYPEPLKTLMRSEFPAALVAAFVLSRINPFGNSRLVLFVEYHTPMYL 360
QY 361 FELPEPFLLCVFGGLWCAFFIRANIAMCRKRKSTKFGKYVLEVYIYAATVIAFPNPY 420
Db 361 FELPEPFLLCVFGGLWCAFFIRANIAMCRKRKSTKFGKYVLEVYIYAATVIAFPNPY 420
QY 421 TRLNTSLILELFDGCPLESSSLCDYRNDMNASKIYDDIPDRPAGIGVYSALWQCLAL 480
Db 421 TRLNTSLILELFDGCPLESSSLCDYRNDMNASKIYDDIPDRPAGIGVYSALWQCLAL 480
QY 481 IFKIMTVFPGIKVPSGLFIPSMALGAIAGRIYGLAVEOLAVYHHWMEFEKCEVAD 540
Db 481 IFKIMTVFPGIKVPSGLFIPSMALGAIAGRIYGLAVEOLAVYHHWMEFEKCEVAD 540
QY 541 CTPPGLYAMGAACLCGVTMTVSLVYVIFELTGLELYVPLMAAVMTSKWGDAGRE 600
Db 541 CTPPGLYAMGAACLCGVTMTVSLVYVIFELTGLELYVPLMAAVMTSKWGDAGRE 600
QY 601 GIYEAHRLNGYPLDAKEEFTHTTLAADYMRPRNDPPLAVLTQDNMTVDIENMTNET 660
Db 601 GIYEAHRLNGYPLDAKEEFTHTTLAADYMRPRNDPPLAVLTQDNMTVDIENMTNET 660
QY 661 SYNGFPVIMSKESQRLVGFALRDLTIAIESARKKOGIYSSRCVCFQHTPLSPASPR 720
Db 661 SYNGFPVIMSKESQRLVGFALRDLTIAIESARKKOGIYSSRCVCFQHTPLSPASPR 720
QY 721 PLKRLSLDMSPTVYDHTMEIYVDFRKLGLRQCLVTHNGRLGTTTKDILRHMAQT 780
Db 721 PLKRLSLDMSPTVYDHTMEIYVDFRKLGLRQCLVTHNGRLGTTTKDILRHMAQT 780
QY 781 ANODPASIMFN 791
Db 781 ANODPASIMFN 791

RESULT 2
US-09-804-472-4
; Sequence 4, Application US/09804472
; Patent No. US20020143146a1
; GENERAL INFORMATION:
; APPLICANT: SHAO, Wei et al.
; TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
; FILE REFERENCE: CL001163
; CURRENT APPLICATION NUMBER: US/09/804,472
; CURRENT FILING DATE: 2001-03-13
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 765
; TYPE: PRT
; ORGANISM: Human
US-09-804-472-4

Query Match          96.6%; Score 4033; DB 10; Length 765;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 765; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Db 121 WGSNETTFFERDCKCPQKMTAAELIQOAEPPGSYIMNYIMFWALSFAPLAVSLVKVFA 180
QY 207 PYACGSGIPEIKITLISGFIIRGYLGKWTLMKITTTLVLAVASGLSGKEGPLVHVACCCG 266
Db 181 PYACGSGIPEIKITLISGFIIRGYLGKWTLMKITTTLVLAVASGLSGKEGPLVHVACCCG 240
QY 267 NIFSYLEPKYSTNEAKKREVLISAAGSVAFGAPIGVLFSEVSYYPEPLKTLMRSF 326
Db 241 NIFSYLEPKYSTNEAKKREVLISAAGSVAFGAPIGVLFSEVSYYPEPLKTLMRSF 300
QY 327 PAALVAAFVLSRINPFGNSRLVLFVEYHTPMYLFELPEPFLLCVFGGLWCAFFIRANIA 386
Db 301 PAALVAAFVLSRINPFGNSRLVLFVEYHTPMYLFELPEPFLLCVFGGLWCAFFIRANIA 360
QY 387 WCRRRKSTKFGKPVLEVIYAATVIAFPNPYTRLNTSELIKELFTDCGPLESSSLCD 446
Db 361 WCRRRKSTKFGKPVLEVIYAATVIAFPNPYTRLNTSELIKELFTDCGPLESSSLCD 420
QY 447 YRNDMNASKIYDDIPDRPAGIGVYSALWQCLALIFKIMTVFPGIKVPSGLFIPSMAL 506
Db 421 YRNDMNASKIYDDIPDRPAGIGVYSALWQCLALIFKIMTVFPGIKVPSGLFIPSMAL 480
QY 507 GATAGRIYGLAVEOLAVYHHWMEFEKCEVADCTTPGLYAMVGAACLCGVTMTVSL 566
Db 481 GATAGRIYGLAVEOLAVYHHWMEFEKCEVADCTTPGLYAMVGAACLCGVTMTVSL 540
QY 567 VVIVFELTGLELYVPLMAAVMTSKWGDAGREGIYEAHRLNGYPLDAKEEFTHTTL 626
Db 541 VVIVFELTGLELYVPLMAAVMTSKWGDAGREGIYEAHRLNGYPLDAKEEFTHTTL 600
QY 627 AADVMRPRNDPPLAVLTQDNMTVDIENMTSYNGFPVIMSKESQRLVGFALRDLT 686
Db 601 AADVMRPRNDPPLAVLTQDNMTVDIENMTSYNGFPVIMSKESQRLVGFALRDLT 660
QY 687 IATESARKKOGIYSSRCVCFQHTPLSPASPRPLKRLSLDMSPTVYDHTMEIYVD 746
Db 661 IATESARKKOGIYSSRCVCFQHTPLSPASPRPLKRLSLDMSPTVYDHTMEIYVD 720
QY 747 IFRKLGLRQCLVTHNGRLGTTTKDILRHMAQTANODPASIMFN 791
Db 721 IFRKLGLRQCLVTHNGRLGTTTKDILRHMAQTANODPASIMFN 765

RESULT 3
US-09-804-472-5
; Sequence 5, Application US/09804472
; Patent No. US20020143146a1
; GENERAL INFORMATION:
; APPLICANT: SHAO, Wei et al.
; TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
; FILE REFERENCE: CL001163
; CURRENT APPLICATION NUMBER: US/09/804,472
; CURRENT FILING DATE: 2001-03-13
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 767
; TYPE: PRT
; ORGANISM: Human
US-09-804-472-5

Query Match          96.3%; Score 4022; DB 10; Length 767;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 765; Conservative 0; Mismatches 0; Indels 2; Gaps 1;

```

```

Db 61 SAEMKSLDYDAMSGMLVLTGLASGALAGLIDIAADMMTDKEGICLSALWYNEHOC 120
Oy 147 WGSNETFEERDKCPOMKTAELLIGOEGRGSIYIMYIMYIFMALSFAPLAVSLVFA 206
Db 121 WGSNETFEERDKCPOMKTAELLIGOEGRGSIYIMYIMYIFMALSFAPLAVSLVFA 180
Oy 207 PYACSGIPEIKTILSGFIIRGYLGKWTLMKITTLLVAASGLSLKEGPIVHVACCG 266
Db 181 PYACSGIPEIKTILSGFIIRGYLGKWTLMKITTLLVAASGLSLKEGPIVHVACCG 240
Oy 267 NITSYLEPPEKSTNEAKREVLASAAGSVAGAPIGVLFSLSEVSYFPLKTLMSRF 326
Db 241 NITSYLEPPEKSTNEAKREVLASAAGSVAGAPIGVLFSLSEVSYFPLKTLMSRF 300
Oy 327 FAALVAFAVRSINPEFNSRLVFEYEHYHTPWYLFELFPTLLGFGGLGAFIRANIA 386
Db 301 FAALVAFAVRSINPEFNSRLVFEYEHYHTPWYLFELFPTLLGFGGLGAFIRANIA 360
Oy 387 WCRRRKSTKFGKYPVLEVIIVAAITVAIAPNPYTRLNTSELIKELFTDGPLESSLCD 446
Db 361 WCRRRKSTKFGKYPVLEVIIVAAITVAIAPNPYTRLNTSELIKELFTDGPLESSLCD 420
Oy 447 YRDMNASKIYDDIPDRPAIGVSAIWOCLALIEKIIMTVTFPGIKVPSGLFIPSMAT 506
Db 421 YRDMNASKIYDDIPDRPAIGVSAIWOCLALIEKIIMTVTFPGIKVPSGLFIPSMAT 480
Oy 507 GATAGRIYGAIVBOLAYHHDMWTFEKMECEVADCTPGIYAWGAACGAGVTBMTVSL 566
Db 481 GATAGRIYGAIVBOLAYHHDMWTFEKMECEVADCTPGIYAWGAACGAGVTBMTVSL 540
Oy 567 VVIVFELTGLLEYIVPLMAAVMTSKWVGDAFREGIYEAHIRLNGVPELDAKE--EFTHT 624
Db 541 VVIVFELTGLLEYIVPLMAAVMTSKWVGDAFREGIYEAHIRLNGVPELDAKEEFTHT 600
Oy 625 TLADAVRRPRNDPPLAVLQDWMVTVDIENMNETSYNCFPIYMSKESQRLVGFALRD 684
Db 601 TLADAVRRPRNDPPLAVLQDWMVTVDIENMNETSYNCFPIYMSKESQRLVGFALRD 660
Oy 685 LTTAIESARKKOGIYSSHVCAOHTPSPAESPRPLKRSILDSMPFTVDTHTPMEIV 744
Db 661 LTTAIESARKKOGIYSSHVCAOHTPSPAESPRPLKRSILDSMPFTVDTHTPMEIV 720
Oy 745 VDIFRKLGLRQCLVTHNGRLGIITTKDILRHMAQTANODPASIMFN 791
Db 721 VDIFRKLGLRQCLVTHNGRLGIITTKDILRHMAQTANODPASIMFN 767

RESULT 4
US-10-109-562A-2
; Sequence 2, Application US/10109562A
; Publication No. US20030033625A1
; GENERAL INFORMATION:
; APPLICANT: Allen, Keith D.
; TITLE OF INVENTION: TRANSGENIC MICE CONTAINING CLCN4
; FILE REFERENCE: R-890
; CURRENT APPLICATION NUMBER: US/10/109,562A
; PRIOR FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: US 60/280,312
; PRIOR FILING DATE: 2001-03-29
; PRIOR APPLICATION NUMBER: US 60/324,640
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 747
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-109-562A-2

Query Match 77.0%; Score 3217; DB 9; Length 747;
Best Local Similarity 77.6%; Pred. No. 6,9e-292;
Matches 580; Conservative 83; Mismatches 84; Indels 0; Gaps 0;

```

```

Oy 45 LDLDDEIPGVGYDDEHTIDMWREKCKDREHRRINSKKKESAMENTKSLYDAMSGMLV 104
Db 1 MDLEEPFPGVGYDDEHTIDMWREKCKDREHRRINSKKKESAMENTKSLYDAMSGMLV 60
Oy 105 VTLTGLASGALAGLIDIAADMMTDKEGICLSALWYNEHOCWGSNETFEERDKCPOMK 164
Db 61 MLTIIGLAGTLAGVIDLAVDMMTDKRGVCLSAFWYSHEDCCWMSNETFEEDRDKCPLOM 120
Oy 165 TMAELTIGQADGPGSIYIMYIMYIFMALSFAPLAVSLVKKFAPAPACSGIPEIKTILSGF 224
Db 121 KWSLELLSQSEGASAYILNTLMTLIMALLFAFLAVSLVRFAPAPACSGIPEIKTILSGF 180
Oy 225 IIRGYLGKWTLMKITTLLVAASGLSLKEGPIVHVACCGNIFYSLFPRYSTNEAKR 284
Db 181 IIRGYLGKWTLMKITTLLVAASGLSLKEGPIVHVACCGNIFYSLFPRYSTNEAKR 240
Oy 285 EVLSAASAGSVAGAPIGVLFSLSEVSYFPLKTLMSFEALVAFAVRSINPEGN 344
Db 241 EVLSAASAGSVAGAPIGVLFSLSEVSYFPLKTLMSFEALVAFAVRSINPEGN 300
Oy 345 SRLVLFVEYHTPWYLFELFPTLLGFGGLGAFIRANIAMCRKSTKFGKIPVLEV 404
Db 301 SRLVLFVEYHTPWYLFELFPTLLGFGGLGAFIRANIAMCRKSTKFGKIPVLEV 360
Oy 405 IIVAAITVAIAPNPYTRLNTSELIKELFTDGPLESSLCDYRDMNASKIYDDIPDRP 464
Db 361 IIVAAITVAIAPNPYTRLNTSELIKELFTDGPLESSLCDYRDMNASKIYDDIPDRP 420
Oy 465 AGIGVSAIWOCLALIEKIIMTVTFPGIKVPSGLFIPSMATGRIYGAIVBOLAY 524
Db 421 AGIGVSAIWOCLALIEKIIMTVTFPGIKVPSGLFIPSMATGRIYGAIVBOLAY 480
Oy 525 HHDMFTFEKMECEVADCTPGIYAWGAACGAGVTBMTVSLVIVBELTGLLEYIVPLM 584
Db 481 HHDMFTFEKMECEVADCTPGIYAWGAACGAGVTBMTVSLVIVBELTGLLEYIVPLM 540
Oy 585 AAVMTSKWVGDAFREGIYEAHIRLNGVPELDAKEEFTHTTLADAVRRPRNDPPLAVLT 644
Db 541 AAVMTSKWVGDAFREGIYEAHIRLNGVPELDAKEEFTHTTLADAVRRPRNDPPLAVLT 600
Oy 645 QDNMTVDIENMNETSYNCFPIYMSKESQRLVGFALRDLTIAIESARKKOGIYSSR 704
Db 601 QDNMTVDIENMNETSYNCFPIYMSKESQRLVGFALRDLTIAIESARKKOGIYSSR 660
Oy 705 VCFQHTPSPAESPRPLKRSILDSMPFTVDTHTPMEIVVDIFRKLGLRQCLVTHNGRL 764
Db 661 MYFTEPPELPLANSPPHLKRLRIENLSPFTVDTHTPMEIVVDIFRKLGLRQCLVTHNGRL 720
Oy 765 LGIITTKDILRHMAQTANODPASIMFN 791
Db 721 LGIITTKDILRHMAQTANODPASIMFN 747

RESULT 5
US-09-991-936-1915
; Sequence 1915, Application US/09991936
; Publication No. US20030073827A1
; GENERAL INFORMATION:
; APPLICANT: Brandt, Kevin S.
; APPLICANT: Gaines, Patrick J.
; APPLICANT: Stinchcomb, Dan T.
; APPLICANT: Wisniewski, Nancy
; TITLE OF INVENTION: FLUA HEAD, NERVE CORD, HINDGUT AND MALPIGHIAN TUBULE
; FILE REFERENCE: FC-6-C1
; CURRENT APPLICATION NUMBER: US/09/991,936
; PRIOR FILING DATE: 2001-11-21
; PRIOR APPLICATION NUMBER: US/09/543,668
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: 60/128,704
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 1959

```


Db 121 FNDGALSSQLCDYINDPNMTRPVDDIPDRPAGVYTAMQALALLIKRIYVTITFFG 180

Qy 493 IK 494
:|

Db 181 MK 182

```

RESULT 7
US-09-864-761-47670
Sequence 47670. Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharon G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
FILE REFERENCE: Aecomica-X-1
CURRENT FILING DATE: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIORITY FILING DATE: US 60/180,312
PRIORITY FILING DATE: 2000-02-04
PRIORITY FILING DATE: US 60/207,456
PRIORITY FILING DATE: 2000-05-26
PRIORITY FILING DATE: US 09/632,366
PRIORITY FILING DATE: 2000-08-03
PRIORITY FILING DATE: GB 24263.6
PRIORITY FILING DATE: 2000-10-04
PRIORITY FILING DATE: US 60/236,359
PRIORITY FILING DATE: 2000-09-27
PRIORITY FILING DATE: PCT/US01/00666
PRIORITY FILING DATE: 2001-01-30
PRIORITY FILING DATE: PCT/US01/00667
PRIORITY FILING DATE: 2001-01-30
PRIORITY FILING DATE: PCT/US01/00664
PRIORITY FILING DATE: 2001-01-30
PRIORITY FILING DATE: PCT/US01/00669
PRIORITY FILING DATE: 2001-01-30
PRIORITY FILING DATE: PCT/US01/00665
PRIORITY FILING DATE: 2001-01-30
PRIORITY FILING DATE: PCT/US01/00668
PRIORITY FILING DATE: 2001-01-30
PRIORITY FILING DATE: PCT/US01/00663
PRIORITY FILING DATE: 2001-01-30
PRIORITY FILING DATE: PCT/US01/00662
PRIORITY FILING DATE: 2001-01-30
PRIORITY FILING DATE: PCT/US01/00661
PRIORITY FILING DATE: 2001-01-30
PRIORITY FILING DATE: PCT/US01/00670
PRIORITY FILING DATE: 2001-01-30
PRIORITY FILING DATE: US 60/234,687
PRIORITY FILING DATE: 2000-09-21
PRIORITY FILING DATE: US 09/608,408
PRIORITY FILING DATE: 2000-06-30
PRIORITY FILING DATE: US 09/774,203
PRIORITY FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Anomax Sequence Listing Engine vers. 1.1
SEQ ID NO 47670
LENGTH: 166
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: MAP TO AI239323.2
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 8.9
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 3.9
OTHER INFORMATION: EST HUMAN HIT: AI133286.1, EVALUATE 1.00e-60
OTHER INFORMATION: SWISSPROT HIT: P51795, EVALUATE 5.00e-82
US-09-864-761-47670
Query Match 16.5%; Score 687.5; DB 10; Length 166;
Best Local Similarity 74.3%; Pred. No.2.6e-56;

```

| | Matches | 124, | Conservative | 22, | Mismatches | 20, | Indels | 1, | Gaps | 1, |
|----|---------|---|--------------|-----|------------|-----|--------|----|------|----|
| QY | 328 | AALVAAFVLRISINPGNSRLVLFVEYEHTPMWLFEPFETLLGFGGLMGAFIRANIAM | 387 | | | | | | | |
| | | | | | | | | | | |
| Db | 1 | AALVAAFVLRISINPGNSRLVLFVEYEHTPMWLFEPFETLLGFGGLMGAFIRANIAM | 60 | | | | | | | |
| QY | 388 | CRRKSTFGKGVPLEVLIIVAAITVIAFPNPNYETLNSLKEPFTCCGLSSLDY | 447 | | | | | | | |
| | | | | | | | | | | |
| Db | 61 | CRKRTTQLGKIPVLEVLVWTAITVIAFLPNNYTMTSTSELSEFNOCGLDLSKLDY | 120 | | | | | | | |
| QY | 448 | RNDMASKIVDDIPDRPAGIGVYSAINOCLALIRKIIMTVFTGIC | 494 | | | | | | | |
| | | | | | | | | | | |
| Db | 121 | EKRFTISK-GGELPDRPAGVGYSSAMQALALILLIKYITITFTPMK | 166 | | | | | | | |

```

1  RESULT 8
2  US-09-864-761-34035
3  Sequence 34035 Application US/09864761
4  Patent No. US2002048763A1
5  GENERAL INFORMATION:
6  APPLICANT: Penn, Sharron G.
7  APPLICANT: Rank, David R.
8  APPLICANT: Hanzel, David K.
9  APPLICANT: Chen, Wensheng
10 TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
11 TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
12 FILE REFERENCE: Aeomica-X-1
13 CURRENT APPLICATION NUMBER: US/09/864,761
14 PRIOR FILING DATE: 2001-05-23
15 PRIOR APPLICATION NUMBER: US 60/180,312
16 PRIOR FILING DATE: 2000-02-04
17 PRIOR APPLICATION NUMBER: US 60/207,456
18 PRIOR FILING DATE: 2000-05-26
19 PRIOR APPLICATION NUMBER: US 09/632,366
20 PRIOR FILING DATE: 2000-08-03
21 PRIOR APPLICATION NUMBER: GB 24263,6
22 PRIOR FILING DATE: 2000-10-04
23 PRIOR APPLICATION NUMBER: US 60/236,359
24 PRIOR FILING DATE: 2000-09-27
25 PRIOR APPLICATION NUMBER: PCT/US01/00666
26 PRIOR FILING DATE: 2001-01-30
27 PRIOR APPLICATION NUMBER: PCT/US01/00667
28 PRIOR FILING DATE: 2001-01-30
29 PRIOR APPLICATION NUMBER: PCT/US01/00664
30 PRIOR FILING DATE: 2001-01-30
31 PRIOR APPLICATION NUMBER: PCT/US01/00669
32 PRIOR FILING DATE: 2001-01-30
33 PRIOR APPLICATION NUMBER: PCT/US01/00665
34 PRIOR FILING DATE: 2001-01-30
35 PRIOR APPLICATION NUMBER: PCT/US01/00668
36 PRIOR FILING DATE: 2001-01-30
37 PRIOR APPLICATION NUMBER: PCT/US01/00663
38 PRIOR FILING DATE: 2001-01-30
39 PRIOR APPLICATION NUMBER: PCT/US01/00662
40 PRIOR FILING DATE: 2001-01-30
41 PRIOR APPLICATION NUMBER: PCT/US01/00661
42 PRIOR FILING DATE: 2001-01-30
43 PRIOR APPLICATION NUMBER: PCT/US01/00670
44 PRIOR FILING DATE: 2001-01-30
45 PRIOR APPLICATION NUMBER: US 60/234,687
46 PRIOR FILING DATE: 2000-09-21
47 PRIOR APPLICATION NUMBER: US 09/608,408
48 PRIOR FILING DATE: 2000-06-30
49 PRIOR APPLICATION NUMBER: US 09/774,203
50 PRIOR FILING DATE: 2001-01-29
51 NUMBER OF SEQ ID NOS: 49117
52 SOFTWARE: Anomax Sequence Listing Engine vers. 1.1
53 SEQ ID NO 34035
54 LENGTH: 161
55 TYPE: PRT
56 ORGANISM: Homo sapiens
57 FEATURE:
58 OTHER INFORMATION: MAP TO AC003666.1

```

```

PRIORITY FILLING DATE: 2000-08-03
PRIORITY APPLICATION NUMBER: GB 24263.6
PRIORITY FILLING DATE: 2000-10-04
PRIORITY APPLICATION NUMBER: US 60/236,359
PRIORITY FILLING DATE: 2000-09-27
PRIORITY APPLICATION NUMBER: PCT/US01/00666
PRIORITY FILLING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00667
PRIORITY FILLING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00664
PRIORITY FILLING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00669
PRIORITY FILLING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00665
PRIORITY FILLING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00668
PRIORITY FILLING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00663
PRIORITY FILLING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00662
PRIORITY FILLING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00661
PRIORITY FILLING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: PCT/US01/00670
PRIORITY FILLING DATE: 2001-01-30
PRIORITY APPLICATION NUMBER: US 60/234,687
PRIORITY FILLING DATE: 2000-09-21
PRIORITY APPLICATION NUMBER: US 09/608,408
PRIORITY FILLING DATE: 2000-06-30
PRIORITY APPLICATION NUMBER: US 09/774,203
PRIORITY FILLING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annonmax Sequence Listing Engine vers. 1.1
SEQ ID NO 34036
LENGTH: 75
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: MAP TO AC003666.1
OTHER INFORMATION: EXPRESSED IN HBL100, SIGNAL = 0.93
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 2.9
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 2.5
OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 1.4
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.97
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 2.5
OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 0.63
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 0.81
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.77
OTHER INFORMATION: EST_HUMAN HIT: H38319.1, EVALUATE 6.00e-36
OTHER INFORMATION: SWISSPROT HIT: P51794, EVALUATE 1.00e-36
US-09-864-761-34036

Query Match          6.4%; Score 267; DB 10; Length 75;
Best Local Similarity 69.9%; Pred.No.1.7e-17;
Matches 51; Conservative 10; Mismatches 12; Indels 0; Gaps 0;

QY      689  TESARKKQEGIVSGSRVCFACHTPSLPEASPPPLRLSLDMSPTVTVDHTFMELTVDLF 748
       3  LENARQRQECIGSVNSIMVFTEEPPELPANSPPHLKRLRLNLSPTVTVDHFTMETVVDIF 62
Db      749  RKLGLRQCLVTHN 761
           |||||
Db      63  RKLGLRQCLVTRS 75

RESULT 11
US-09-864-761-37070
Sequence 37070, Application US/09864761
Patient No. US20020048763AI
GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
```

GENERAL INFORMATION:
APPLICANT: NAKAGAWA, SATOSHI
APPLICANT: MIZOGUCHI, HIROSHI
APPLICANT: ANDO, SEIKO
APPLICANT: HAYASHI, MIKIRO
APPLICANT: OCHIAI, KEIKO
APPLICANT: YOKOI, HARUHIKO
APPLICANT: TATEISHI, MAOKO
APPLICANT: SENOH, AKIHIRO
APPLICANT: IKEDA, MASATO
APPLICANT: OZAKI, AKIO
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-125
CURRENT APPLICATION NUMBER: US/09/738,626
CURRENT FILING DATE: 2000-12-18
PRIOR APPLICATION NUMBER: JP 99/377484
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: JP 00/159162
PRIOR FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: JP 00/280988
PRIOR FILING DATE: 2000-08-03
NUMBER OF SEQ. ID NOS: 7059
SOFTWARE: PatentIn ver. 3.0
SEQ ID NO 3570
LENGTH: 423
TYPE: PRT
ORGANISM: Corynebacterium glutamicum
US-09-738-626-3570

Query Match 4.0%; Score 169; DB 9; Length 423;
Best Local Similarity 20.8%; Pred. No. 3,1e-07;
Matches 89; Conservative 62; Mismatches 145; Indels 132; Gaps 15;

DQ 190 WALSPAFIA-----VSIVVFAPVACSGSIPETKITLSEGIIFINGLYGKMTLMIKITTLVLA 245
|||: |||: | : : : ||| : |
DB 71 WAMFVHHTGCKREVSIVGAIR---GEKMPILETIASAF-----QYTT 110
|||: |||: | : : : ||| : |
DQ 246 VASGLSLCKEGPVLHVACCNGIFSYLEFPKYSTNEAKKREVLSAASAAGSVAFGARPTGG 305
|||: |||: | : : : ||| : |
DB 111 VAAGPAPVAENAPRIAGALVGEEFERMWL---QLDIDARKIIIVASAAGAGLGASFHLPLAG 167
|||: |||: | : : : ||| : |
DQ 306 VLFSLE----EVSYYFFPKLTLMRSFEFAALLVAFAVLRKSINPFGNSLVLFVEYHNRPWLF 361
|||: |||: | : : : ||| : |
DB 168 VLFALVELLVLESSTRFTVIAIITTTAAAVATTGFVOTPDVESTVLT-----ESPMML 221
|||: |||: | : : : ||| : |
DQ 362 ELFPFLILFVGVGMGAFPIRA-----NIAMCRRKSTFKGYPLEVIIVA 409
|||: |||: | : : : ||| : |
DB 222 AA--MWTGVVAAGMGCHMFSAAHNMADASPGRVILW-----QMPLGFVIAAV 268
|||: |||: | : : : ||| : |
DQ 410 ITAVIAFNPPTRLNTSELIELFTDCGPLBSSSLCDYRNDMNASKIYDDIPDRPAGIGV 469
|||: |||: | : : : ||| : |
DB 269 I-----YFFPETLANPRWLADSMLCD-LILISTIL----- 297
|||: |||: | : : : ||| : |
DQ 470 YSAIMQLCALIFKIMVTFEGIKVPSPGLFPSMAIGAIGRIAGVIEOLAYNHDMF 529
|||: |||: | : : : ||| : |
DB 298 -----LVLYKRAMPLLAFRVGMVGNLIPAFALGSMMGVGVGANVERITN----- 343
|||: |||: | : : : ||| : |
DQ 530 IFKEWCEVGDCTTPPGILYAMGAAACLCGVTTRMTVLSVVIVFELTGLEY-----IVP 582
|||: |||: | : : : ||| : |
DB 344 -----VPVIAFALLGAAAF-----STTMAAPRFGLIAVAVEFTDMEAGYL 385
|||: |||: | : : : ||| : |
DQ 583 LMAAVMTS 590
|||: |||: | : : : ||| : |
DB 386 IFLAVASA 393
|||: |||: | : : : ||| : |

RESULT 13
US-10-014-502-2
Sequence 2, Application US/10014502
Patent No. US20020137184A1
GENERAL INFORMATION:
APPLICANT: YE, Jane et al.
TITLE OF INVENTION: ISOLATED HUMAN PROTEASE PROTEINS,

